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Improving the development of learning materials for open and distance learning

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Abstract

Planning and writing learning materials for open and distance learning is a true challenge no matter the type of academic institution. The purpose of the present study was to show that open and distance learning materials for the teaching-learning of “Introduction to Tourism” should be adapted so as to create a holistic educational experience for our students, to promote active, effective learning print, and to allow assessment of effectiveness. In this context, particular attention should be given to assessment, a type of activity that differs widely from classical academic education.

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1. Introduction

I have been planning and writing learning materials for use in Open and Distance Learning (ODL) for over 15 years, teaching Introduction to Tourism (IT) in a technical university. As a teacher, content provider, writer and instructional designer, I had to pay attention to all of the following aspects:

- How could I assess the effectiveness of ITODL?
- How should I manage the drafting and quality assurance processes to produce high-quality ITODL materials on time and within budget?
- How should I plan ITODL courses to develop a holistic experience at a distance?
- In what ways are print ITODL materials different?
- In what ways are print ITODL materials similar?
- Should I adapt my existing IT learning materials (textbooks) or develop new ITODL ones?
- What are the dissimilarities between Introduction to Tourism Open and Distance Learning (ITODL) materials and other types of IT learning materials?
- What are the similarities between Introduction to Tourism Open and Distance Learning (ITODL) materials and other types of IT learning materials?
- What techniques should I use to promote active, effective learning of IT in print?

The purpose of the study is to show that ODL materials differ from other types of learning material and, therefore, the existing materials should be adapted so as to create a holistic educational experience, to promote

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active, effective learning in print, and to allow assessment of effectiveness. Assessment of effectiveness is of particular importance here because it is in assessing that lie the main differences (no teacher, no marking work) between traditional print learning materials and print ODL materials.

2. Importance of assessment in ITODL materials

Assessment is important in ITODL materials because of the following reasons:

- students using ODL materials are registered for support and assessment with an educational institution;
- an ODL course includes learning materials, tutorial support, assessment, administration, and so on;
- in instructional design:
 - E the constructive type of instructional design (in which the emphasis is on learner choice of task and situation and on the validity of any learner response) recommends self-evaluation rather than formal assessment;
 - E instructional designers decide how learning will be assessed at the end of the course or, if the assessment is in stages, during the course;
 - E instructional designers plan any self-assessment needed for each unit;
- in turning old textbooks into ODL teaching materials, adding self-assessment material is a must;
- in planning an ODL course:
 - E self-assessment is designed based on the students' self-assessment skills;
 - E assessment is planned depending on the objectives of the course;
 - E online assessment is completed by given dates to better pace learning;
 - E assessment specification (e.g., number of occasions when assessment will take place, type of assessment, how to use assessment, etc.) is included in the course specification;
 - E information on assessment is provided by course guides;
- in planning and writing units of learning, self-assessment questions are part of summative learning, while activities are part of formative learning.

Planning assessment principles and methods are explained in detail below.

3. Planning assessment in ITODL learning materials

My ITODL materials contain two types of assessment: self-assessment (student-aimed) and assessment (teacher-aimed).

3.1. Planning and writing self-assessment in ITODL materials

Self-assessment is of much importance in ODL because students do not have many opportunities to measure their progress (they do not answer questions set by the teacher, they do not do short tests, they do not hear discussion of problems raised by other students) as it happens in the classroom. This is why self-assessment tests are designed as to remedy this deficiency. Designed to cover a unit or a chapter of the ODL material, a self-assessment test should provide students with:

- summative feedback on their learning of the unit or chapter;
- corrections of errors and misunderstandings (if any);
- advice on additional study to remedy the errors and misunderstandings (if any).

The most important issues in planning and writing self-assessment in ITODL materials are *the format of the self-assessment test, the content of the questions to be included in the self-assessment, and the format of the questions to be included in the self-assessment.*

3.1.1. The format of the self-assessment test

For a self-assessment to have the proper format, it needs:

- to be of reasonable length in comparison with the length of the unit or chapter (e.g., a 15-minute test for a 2-hour unit, or a 45-minute test for a 10-hour chapter);
- to provide feedback on correct answers;
- to take the minimum amount of time necessary to give the students a clear picture of their progress;
- to test as much of the content of the unit or chapter as possible in terms of new concepts, facts, methods, methods of creating things (reports, spreadsheets, etc.), problem-solving methods, rules, skills of analysis, theories, vocabulary, etc.;
- to use diagnostic questions, i.e. questions with a single correct answer and a small number of predictable wrong answers, allowing the teacher to identify where the students went wrong.

3.1.2. The content of the questions to be included in the self-assessment

A good rule of thumb when writing a test-question is to observe the following steps:

- develop an idea for the question;
- write down the expected answer;
- write the question for the expected answer;
- write down the expected mistakes;
- write the feedback to the expected mistakes.

3.1.3. The format of the questions to be included in the self-assessment

Most authors recommend Bloom's taxonomy (1956) in the choice of an appropriate question format. Thus:

- in testing *Knowledge* (i.e., recalling data or information), I expect my students to define, describe, identify, know, label, list, match, name, outline, recall, recognize, reproduce, select, or state something, and the best suitable self-assessment formats would be 'choose from below (multiple choice)', 'fill in the blanks', 'give short answers', 'match', and 'state if true/false'; Table 1 is an example of *multiple choice assessment*:

Table 1. *Multiple choice assessment*

Statements	a	b	c
Employment multiplier measures the total amount of employment created by an ... unit of tourism expenditure.	<u>additional</u>	complementary	supplementary
Government revenue multiplier measures the impact on government revenue as a consequence of an ... in tourist expenditure.	decrease	increase	growth
Income multiplier measures the additional income created in the economy as a ... of the increased tourist expenditure.	consequence	output	result
Output multiplier is concerned with changes in the ... levels of production and not with the volume and value of sales.	actual	present	real
Transactions or sales multipliers measures the ratio between the two changes.	four	three	two

- in testing *Comprehension* (i.e. understanding of meanings, translations, interpolations, and interpretations of instructions and problems), I expect my students to comprehend, convert, defend, distinguish, estimate, explain, extend, generalize, give examples, infer, interpret, paraphrase, predict, rewrite, summarise, or translate something, and the best suitable self-assessment formats would be 'choose from below (multiple choice)', 'fill in the blanks', 'give short answers', 'match', 'and 'state if true/false'; Figure 1 shows an example of *fill in the blanks assessment*:

<i>barriers – marketing – product – resources</i>
Growth for the first time in modern travel history can no longer be taken for granted in a world marketplace where <u>barriers</u> and constraints to free world movement have been progressively removed. In such circumstances ... becomes a predominant factor. Marketing embraces ... development as well as presentation. The last decade of the twentieth century began to show some serious weaknesses in the task of securing consistent long-term growth in harmony with human and natural ...

Figure 1. *Fill in the blanks assessment*

- in testing *Application* (i.e. using a concept in a new situation or using an abstraction unprompted), I expect my students to apply, change, compute, construct, demonstrate, discover, manipulate, modify, operate, predict, prepare, produce, relate, show, solve, or use something, and the best suitable self-assessment formats would be ‘choose from below (multiple choice), ‘create’, ‘do’, ‘fill in the blanks’, ‘match’, and ‘state if true/false’; Figure 2 is an example of *create/do assessment*:

Make an assessment of the tourism potential of your area/city/town starting from the SWOT analysis of its economic profile.

Figure 2. Create/do assessment

- in testing *Analysis* (i.e. separating materials or concepts into component parts so that its organizational structure may be understood), I expect my students to analyse, break down, compare, contrast, diagram, deconstruct, differentiate, discriminate, distinguish, identify, illustrate, infer, outline, relate, select, or separate something, and the best suitable self-assessment formats would be ‘choose from below (multiple choice), ‘create’, ‘do’, ‘fill in the blanks’, ‘give short answers’, ‘match’, ‘state if true/false’, ‘write an essay / a project / a report’; Table 2 is an example of *match assessment*:

Table 2. Match assessment

A		B	
1.	Domestic tourism	a.	involves non-residents travelling in the given country.
2.	Inbound tourism	b.	involves residents of a given country travelling only within this country.
3.	Outbound tourism	c.	involves residents travelling in another country.

- in testing *Synthesis* (i.e. building a structure or pattern from diverse elements), I expect my students to categorise, combine, compile, compose, create, devise, design, explain, generate, modify, organize, plan, rearrange, reconstruct, relate, reorganize, revise, rewrite, summarise, tell, and write something, and the best suitable self-assessment formats would be ‘write an essay / a project / a report’; Figure 3 is an example of *write an essay / a project / a report assessment*:

Write a report on the tourism potential of the city of Timisoara based on tourism Internet sites.

Figure 3. Write an essay / a project / a report assessment

- in testing *Evaluation* (i.e. making judgments about the value of ideas or materials), I expect my students to appraise, compare, conclude, contrast, criticize, critique, defend, describe, discriminate, evaluate, explain, interpret, justify, relate, summarise, or support something, and the best suitable self-assessment formats would be ‘choose from below (multiple choice), ‘fill in the blanks’, ‘give short answers’, ‘state if true/false’, ‘write an essay’. Table 3 is an example of *true/false assessment*:

Table 3. True/false assessment

Statement	True	False
A hotel is any establishment offering overnight accommodations.	√	
A hotel manager is, in a spa hotel, the person in charge of the hotel department, which oversees the ship's accommodations, restaurant operations, maintenance and cleaning of the common areas, and the ship's cruise staff.		
A hotel occupancy tax is a government levy on hotel rooms and other lodgings, usually but not always earmarked to fund local or state tourism marketing entities.		
A hotel register is a book, or other record, which hosts sign and which becomes the permanent record of an establishment's guests.		
A hotel representative is a company serving the travel agent channel that serves as the booking contact for a hotel or group of hotels.		
A hotel voucher is a post-paid coupon that can be exchanged at certain hotels for a night's lodging.		

3.2. Planning and writing assessment in ITODL materials

The main aspects of interest in *planning and writing assessments in ITODL materials* are *the length of assessments, the number of assessments to provide, the outcomes to test in the assessment, the place of the assessment in the course, the practicability, the reliability and the validity of the assessment, and the type of assessment*:

- *The length of assessments* depends on how long the students will have to do it (as a matter of fact, it needs to be long enough to provide a valid assessment of what the students have learnt) and on how long it will take the teacher to mark.
- *The number of assessments to provide.* More assessments increase reliability. A rule of thumb, however, says that shorter courses should have two assessments and longer ones, three.
- *The outcomes to test in the assessment.* When there is too much to cover by an assessment, it is better to skip assessing *Knowledge*, since it is indirectly assessed at the other levels (see 3.1.3. *The format of the questions to be included in the self-assessment*), leaving more time for the assessment of higher level outcomes.
- *The place of the assessment in the course.* I need to ensure that assessments cover a coherent collection of outcomes. If there is only one summative assessment, then it is at the end of the course. If there are two or three (formative and summative), then I need to place them after each important part of the course.
- *The practicability, the reliability and the validity of the assessment:* *practicability of an assessment* is a matter of such restraints as length (in terms of length for the students, of time for marking by the teachers) and equipment and assessment centres (that may or may not be available); *reliability of an assessment* depends on the number of assessments (they are more than one) and variety of assessments if there are more than one, they are different); *validity of an assessment* depends on the choice between the assessment methods presented above. (see 3.1.3. *The format of the questions to be included in the self-assessment*)
- *The type of assessment.* As a general rule, it is determined by the learning outcomes I want to assess. The types of assessment are the same as the types of self-assessment mentioned above. (see 3.1.3. *The format of the questions to be included in the self-assessment*)

4. Conclusion

The importance of formative and summative assessment in ODL materials arises from the fact that the teacher is replaced by individual study and by the tutor-student relationship. ODL materials should completely replace the presence of the teacher, except for the final assessment, marking. Both formative and summative assessment provides a clear image of the student's achievements – the feedback both he/she and the teacher need if they really wish to improve.

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